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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/070,298

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Naomi Watanabe

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EXAMINER

FINEMAN, LEE A

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,298

Applicant(s)

WATANABE, NAOMI

Examiner

Lee Fineman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004 and 08 December 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action is in response to amendments filed 8 December 2004 and 27 September 2004 in which claims 1-2 and 7 were amended and claims 8-18 were added. Claims 1-18 are pending.

Drawings

1. The replacement drawing for fig. 1 was received on 27 September 2004. This drawing is acceptable.

Claim Objections

2. Claim 18 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 18 has only limitations that were already included in claim 2 from which it depends.
3. Claims 1-18 are objected to because of the following informalities: In claim 1 lines 11-13, the limitation "accommodating said first optical member, first objective optical system, **and** first ocular optical system, **and** said second objective optical system" is awkward. The examiner recommends removing the first "and." The dependent claims inherit the deficiencies of the claims from which they depend. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 5-6 and 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5 and 6 include the limitation “wherein said beam splitter transmits infrared ray and reflects visible light.” It is unclear from figs. 1 and 5, which show the beam splitter (33/39), how infrared light can be transmitted from the beam splitter to the laser beam receiver (41) when the laser beam receiver is perpendicular to visible/infrared light entering the beam splitter and how the visible light is reflected from the beam splitter when the ocular is parallel to visible/infrared light entering the beam splitter. For the purposes of examination, the situation shown in the drawings will be used, which is wherein said beam splitter reflects infrared ray and transmits visible light. The dependent claims inherit the deficiencies of the claims from which they depend.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 1-4, 7-10 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iizuka, Japanese Patent Publication No. JP 2000066113A in view of Yanagisawa, U.S. Patent No. 5,071,242 and Heidmann et al., U.S. Patent No. 4,671,165.

Regarding claims 1-4, 7, 9 and 13-18, Iizuka discloses a pair of binoculars (figs. 1 or 3) which comprises a first observation optical system comprising a first optical member for forming an erecting image (14) a first objective optical system (2 or 32) that together with said first optical member determines a first objective optical axis (B), and a first ocular optical system (16) that determines together with said first optical member a first ocular optical axis (figs. 1 and 3); a second observation optical system comprising a second optical member for forming an erecting image (13), said second member being placed parallel with said first optical member (figs. 1 or 3), a second objective optical system (1 or 31) that determines together with said second optical member a second objective optical axis (A), and a second ocular optical system (15) that determines together with said second optical member a second ocular optical axis (figs. 1 or 3); a main case accommodating said first and second objective optical system (see machine translation section [0048]) and an attached case (fig. 4) accommodating said second ocular optical system (15) and said second optical member (13), said attached case being placed on said main case so that said attached case can be turned round said second objective optical axis (see machine translation section [0048]); laser range-finding means (10, 11 and fig. 2) accommodated in said main case (figs. 1 and 3 as it is not part of attached case fig. 4); a measured distance displaying means (45) for displaying a distance measured by said laser range-finding means (see figs. 5 and 6), said measured distance displaying means being placed at a part off a light path formed by said first observation optical system (fig. 6), and a displaying optical system (45, 44, 15, fig. 6) for

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projecting the distance displayed by said measured distance displaying means so that the distance is shown at a rim of the visual field (fig. 5); wherein said displaying optical system comprises a relay lens (44) and a reflecting mirror (13a); wherein said laser range-finding means comprises a laser emitter (11) for emitting a laser beam to an object, a laser beam receiver (12) for receiving the laser beam reflected by the object, and range-finding means for measuring the distance between the binoculars and said object based on the length of time from the emission of said laser beam to the receiving thereof (see machine translation sections [0032]-[0033]); wherein said laser emitter comprises a laser diode (11) emitting an infrared ray (see machine translation section [0032]), and a plate beam splitter (7) or prism beam splitter placed on the second objective optical axis (A), said splitter reflecting the infrared ray emitted by the laser diode, whereby the infrared ray is sent to said object through the second objective optical system, and said splitter transmitting visible light incoming through the second objective optical system; wherein said laser diode (11) and said laser beam receiver (12) are placed at a part off a light path formed by said first observation optical system and in the opposite side of the second observation optical system (figs. 1 or 3); wherein said plate beam splitter (7) is placed between said second objective optical system (1 or 31) and said second optical member (13); wherein said reflecting mirror is placed at around a rim of the visual field (see fig. 6) so that the reflecting mirror does not substantially obstruct said light path (13a is at "a rim" of 13 which shows the visual field, also see fig. 5 where the distance is at the rim of visual field); wherein said plate beam splitter (7) is placed between said second objective optical system (1 or 31) and said second optical member (13); and whereby the laser diode (11) emits said infrared ray toward said plate beam splitter perpendicularly to the optical axes of said first and second observation optical

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systems (figs. 1 and 3). Iizuka discloses the claimed invention except for the main case also accommodating said first optical member, and said first ocular optical system; wherein the measured distance displaying means (45) comprising LCD means; wherein the distance displayed by said LCD means is projected on a reticle; wherein said measured distance displaying means is placed in close proximity to said reticle and above the optical axis of the first ocular optical system; and wherein said LCD means is positioned so that the displaying face of said LCD means is vertical to the focusing face of said reticle. Yanagisawa discloses a pair of binoculars (fig. 55) which comprises a first observation optical system comprising a first optical member for forming an erecting image (prisms in 848) a first objective optical system (833) that together with said first optical member determines a first objective optical axis (l'), and a first ocular optical system (in 847b) that determines together with said first optical member a first ocular optical axis (fig. 55); a second observation optical system comprising a second optical member for forming an erecting image (prisms in 836), said second member being placed parallel with said first optical member (fig. 55), a second objective optical system (833) that determines together with said second optical member a second objective optical axis (l), and a second ocular optical system (839) that determines together with said second optical member a second ocular optical axis (fig. 55); a main case accommodating (832a, 848, 847b) said first optical member (prisms in 848), first objective optical system (833), first ocular optical system (in 847b) and said second objective optical system (prisms in 836); an attached case (836, 832b) accommodating said second ocular optical system and said second optical member, said attached case being placed on said main case so that said attached case can be turned round said second objective optical axis (column 22, lines 61-68). It would have been obvious to one of ordinary

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skill in the art at the time the invention was made to modify the case of Iizuka to have the main case also accommodate said first optical member, and said first ocular optical system as suggested Yanagisawa to provide the ability to adjust interocular distance. Heidmann et al. further teaches a range-finding means (figs. 3 and 4) wherein the displaying means comprises an LCD means (105) and said LCD means being placed at a part off a light path formed by the observation optical system, and a displaying optical system for projecting the distance displayed by said LCD means on the reticle (124). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the displaying means be an LCD as suggested by Heidmann et al. as LCDs are commonly available in sizes appropriate to binoculars. Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the reticle of Heidmann et al. to provide guides when pointing at/identifying the object to be measured. Therefore, said measured distance displaying means will be in close proximity to said reticle and above the optical axis of the first ocular optical system (see Iizuka fig. 6, reticle would be at image point 46 and 13a is above the optical axis of the first ocular optical system (B) figs. 1 or 3); and wherein said LCD means is positioned so that the displaying face of said LCD means is vertical to the focusing face of said reticle (Iizuka fig. 6).

Regarding claims 8 and 10, Iizuka in view of Yanagisawa and Heidmann et al. as set forth above disclose the claimed invention except for wherein said laser diode is placed in the vicinity of a wall of said main case by the side of said first observation optical system. It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the laser diode so that it is in the vicinity of a wall of said main case by the side of said first observation optical system, since it has been held that a mere rearrangement of an element

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without modification of the operation of the device involves only routine skill in the art. One would have been motivated to rearrange the laser diode so that it is in the vicinity of a wall of said main case by the side of said first observation optical system for the purpose of making a more compact device. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950).

8. Claims 5-6 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iizuka in view of Yanagisawa and Heidmann et al. as applied to claim 1 above, and further in view of WO 88/02125 (henceforth WO-125).

Iizuka in view of Yanagisawa and Heidmann et al. as applied to claim 1 above further disclose a beam splitter (8) that separates infrared ray from visible light and takes the separated infrared ray out of the light path of said first observation optical system (B); wherein said laser beam receiver (12) receives an infrared ray that was emitted by the laser emitter (11) to an object, reflected by said object, sent into the light path of said first observation optical system (A), and separated by said beam splitter; wherein said beam splitter (8) reflects infrared ray and transmits visible light (figs. 1 or 3). Iizuka in view of Yanagisawa and Heidmann et al. as applied to claim 1 above disclose the claimed invention except wherein said first optical member is the beam splitter. WO-125 teaches binoculars (fig. 1) with a laser range-finding means (5, 15) accommodated therein (abstract); wherein a first optical member (14) is a beam splitter that separates infrared ray from visible light and takes the separated infrared ray out of the light path of said first observation optical system (fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the first optical member of Iizuka in

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view of Yanagisawa and Heidmann et al. also be a beam splitter as suggested by WO-125 to reduce the number of parts and therefore reduce costs.

Response to Arguments

9. Applicant's arguments filed 27 September 2004 have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's arguments filed 8 December 2004 with respect to WO-125 and Heidmann et al. have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's arguments filed 8 December 2004 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., lenses are fixed in the main case) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The present claim is not limited to "the first optical member, first objective optical system, first ocular optical system, and the second objective optical system **being fixed** inside the main case so they do not move when the user adjusts the pupil distance" that the applicant argues as the special structure of the invention on page 6, paragraph 5 of the remarks.

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Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LAF

December 15, 2004



MARK A. ROBINSON
PRIMARY EXAMINER